

Title (en)  
SHAPE MEMORY ALLOY ACTUATOR

Title (de)  
AKTUATOR FÜR EINE FORMSPEICHERNDE LEGIERUNG

Title (fr)  
ACTIONNEUR EN ALLIAGE À MÉMOIRE DE FORME

Publication  
**EP 2613049 A4 20160330 (EN)**

Application  
**EP 11821748 A 20110830**

Priority  
• JP 2010196846 A 20100902  
• JP 2011069512 W 20110830

Abstract (en)  
[origin: EP2613049A1] A shape memory alloy actuator includes a wire portion which is inserted through a first tube member, a shape memory alloy wire portion which is inserted through a second tube member, a movable body which is movable in a direction in which, a length of the shape memory alloy wire portion changes, an elastic member which exerts an external force in a direction in which, the shape memory alloy wire portion elongates, and a fixing member to which, one end of the second tube member and one end of the shape memory alloy wire portion are fixed, and one end of the wire portion is connected to the movable body , and one end of the shape memory alloy wire portion and one end of the wire portion are joined to a joining portion, and the joining portion includes a plurality of crimp terminals.

IPC 8 full level  
**F03G 7/06** (2006.01)

CPC (source: EP US)  
**F03G 7/065** (2021.08 - EP US)

Citation (search report)  
• [E] EP 2472112 A1 20120704 - OLYMPUS CORP [JP]  
• [E] EP 2478821 A1 20120725 - OLYMPUS MEDICAL SYSTEMS CORP [JP]  
• [I] WO 2009006365 A1 20090108 - TELEZYGOLOGY INC [US], et al  
• [Y] US 2007100209 A1 20070503 - TAKAHASHI MASAYA [JP]  
• [Y] EP 2130482 A1 20091209 - OLYMPUS MEDICAL SYSTEMS CORP [JP]  
• See references of WO 2012029732A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2613049 A1 20130710; EP 2613049 A4 20160330; EP 2613049 B1 20171004;** JP 2012052485 A 20120315; JP 5567946 B2 20140806; US 2013174542 A1 20130711; US 8800284 B2 20140812; WO 2012029732 A1 20120308

DOCDB simple family (application)  
**EP 11821748 A 20110830;** JP 2010196846 A 20100902; JP 2011069512 W 20110830; US 201313783245 A 20130302